

### Abstract

A method for one-piece injection molding of a soft needle catheter having a hub and a tube-shaped flexible part. According to the method, a molten polymer is fed into a mold which includes a core that is used to form the interior of the catheter, the core defining a hub cavity and a tube-shaped cavity. The hub cavity includes a cone-shaped part and a cylindrical part, with the cone-shaped part extending into the tube-shaped cavity. When the polymer is sufficiently cured, the core is removed from the catheter and the catheter is removed from the mold.